

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant:	Jacob McGuire	Confirmation No.:	9954
Serial No.:	09/843,816	Group Art Unit:	2442
Filed:	04/30/2001	Examiner:	Benjamin Ailes
For:	Interface For Automated Deployment And Management Of Network Devices	Docket No.:	200704487-1

APPEAL BRIEF

Mail Stop Appeal Brief – Patents
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Date: May 21, 2009

Sir:

Appellant hereby submits this Appeal Brief in connection with the above-identified application. A Notice of Appeal was electronically filed on March 30, 2009.

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I. REAL PARTY IN INTEREST

The real party in interest is Hewlett-Packard Development Company, L.P. (HPDC), a Texas Limited Partnership, having its principal place of business in Houston, Texas. HPDC is a wholly owned affiliate of Hewlett-Packard Company (HPC). The Assignment from the inventor to Loudcloud, Inc., was recorded on January 14, 2002, at Reel/Frame 012467/0831. A Change of Name Document from Loudcloud, Inc., to Opsware Inc., was recorded on February 27, 2007, at Reel/Frame 018971/0837. A Merger Document from Opsware Inc., to Hewlett-Packard Software, LLC, was recorded on May 3, 2008, at Reel/Frame 020897/0062. An Assignment from Hewlett-Packard Software, LLC, to HPC was recorded on May 6, 2008, at Reel/Frame 020897/0937. An Assignment from HPC to HPDC was recorded on May 7, 2008, at Reel/Frame 020909/0707.

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II. RELATED APPEALS AND INTERFERENCES

Appellant is unaware of any related appeals or interferences.

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III. STATUS OF THE CLAIMS

Originally filed claims: 1-21.

Claim cancellations: 9, 19, 21.

Added claims: 22 and 23.

Presently pending claims: 1-8, 10-18, 20 and 22-23.

Presently appealed claims: 1-8, 10-18, 20 and 22-23.

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IV. STATUS OF THE AMENDMENTS

No claims were amended after the Final Office Action dated March 4, 2009.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

This section provides a concise explanation of the subject matter defined in each of the independent claims, referring to the specification by page and line number or to the drawings by reference characters as required by 37 C.F.R. § 41.37(c)(1)(v). Each element of the claims is identified with a corresponding reference to the specification or drawings where applicable. The specification references are made to the application as filed by Appellant. A citation to passages in the specification or drawings for each claim element does not imply that the limitations from the specification and drawings should be read into the corresponding claim element. Further, these specific references are not exclusive; additional support for the subject matter may be found elsewhere in the specification and/or drawings.

The claims are generally directed to systems and methods wherein a library containing various generic commands provides some of the commands to plug-in modules. Each of the plug-in modules is associated with a remote device. Each plug-in module, upon receiving the generic command(s), converts the generic command(s) to a device-specific command appropriate for the target, remote device with which the plug-in module is associated. At least one of these generic commands causes a remote device to be put into its most privileged level via an established connection to the device.

Claim 1 is generally directed to a computer-readable medium comprising a uniform interface for configuring and managing a plurality of different types of network devices. The uniform interface comprises a library 32 containing generic commands 34a-34n that can be applied to the network devices. Fig. 4; p. 9, l. 5 – p. 10, l. 11. The uniform interface also comprises a plurality of plug-in modules 36a-36n that can register with the library, where each of the modules operates to convert at least some of the generic commands into device-specific commands and transmit the device-specific commands to remote individual devices of a type that are associated with the module. Fig. 4; p. 10, l. 12 – p. 21. At least one of the generic commands puts a device into its most privileged level through an established connection to the device. P. 9, ll. 21-22.

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Claim 5 is generally directed to the same subject matter as claim 1 and further requires that another one of the generic commands retrieves the current configuration of a network device by executing appropriate commands on the network device. P. 9, ll. 17-19.

Claim 6 is generally directed to the same subject matter as claim 1 and further requires that another one of the generic commands post-processes configuration information retrieved from another device to render the information suitable for storage and saves it to a local file system. P. 9, ll. 24-26.

Claim 7 is generally directed to the same subject matter as claim 1 and further requires that another one of the generic commands puts another device into a mode where it can accept configuration commands through another established connection at an enabled level. P. 10, ll. 1-3.

Claim 8 is generally directed to the same subject matter as claim 1 and further requires that another one of the generic commands gives another device a complete configuration based on information from a stored configuration file. P. 10, ll. 9-10.

Claim 12 is generally directed to a method for configuring and managing a plurality of different types of network devices. The method comprises establishing a library 32 of generic commands 34a-34n that can be applied to the network devices. Fig. 4; p. 9, l. 5 – p. 10, l. 11. The method also includes registering a plurality of plug-in modules 36a-36n with the library, where each of the modules operates to convert at least some of the generic commands into device-specific commands. Fig. 4; p. 10, l. 12 – p. 21. The method further comprises receiving commands for a given device that is remote from the modules. *Id.* The method still further comprises determining the module that corresponds to the given device and forwarding the received commands to the module. *Id.* The method still further comprises transmitting the device-specific commands from the module to the given device. *Id.* The method also includes one of the generic commands giving a device a complete configuration based on information from a stored configuration file. P. 10, ll. 9-10. The method further

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comprises the module converting a response received from the given device into a generic format for presentation to the library. P. 11, II. 14-21.

Claim 17 is generally directed to the same subject matter as claim 12 and further requires that another one of the generic commands post-processes configuration information retrieved from another device to render the information suitable for storage and saves it to a local file system. P. 9, II. 24-26.

Claim 18 is generally directed to the same subject matter as claim 12 and further requires that another one of the generic commands puts another device into a mode where it can accept configuration commands through an established connection at an enabled level. P. 10, II. 1-3.

Claim 20 is generally directed to the same subject matter as claim 12 and further requires that another one of the generic commands puts another device into its most privileged level through an established connection to the another device. P. 9, II. 21-22.

Claim 22 is generally directed to the same subject matter as claim 12 and further requires that the network devices are selected from the group consisting of switches, firewalls, routers and load balancers. P. 6, II. 1-6.

Claim 23 is generally directed to the same subject matter as claim 1 and further requires that the network devices comprise devices selected from the group consisting of switches, firewalls, routers and load balancers. P. 6, II. 1-6.

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VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether the Examiner erred in rejecting claims 1-4 and 10-11 as allegedly obvious in view of Merchant et al. (U.S. Pub. No. 2002/0128815, hereinafter "Merchant") and Stewart et al. (U.S. Pat. No. 6,970,927, hereinafter "Stewart").

Whether the Examiner erred in rejecting claims 5 and 8 as allegedly obvious in view of Merchant, Stewart and Tindal (U.S. Pat. No. 7,246,162, hereinafter "Tindal").

Whether the Examiner erred in rejecting claims 6-7 and 23 as allegedly obvious in view of Merchant, Stewart and Rangachar (U.S. Pat. No. 6,301,252, hereinafter "Rangachar").

Whether the Examiner erred in rejecting claims 12-16 as allegedly obvious in view of Merchant and Tindal.

Whether the Examiner erred in rejecting claims 17-18 and 22 as allegedly obvious in view of Merchant, Tindal and Rangachar.

Whether the Examiner erred in rejecting claim 20 as allegedly obvious in view of Merchant, Tindal and Stewart.

VII. ARGUMENT

Below, Appellant addresses at least some grounds of rejection by grouping the claims. No grouping should be construed to mean that the patentability of any of the claims in that grouping may be determined in later actions (e.g., actions before a court) based on the grouping. Rather, the presumption of 35 U.S.C. § 282 shall apply to each of the claims individually.

A. Brief Summary of Merchant

Data storage systems often require manual configuration to properly store data. Paragraph 0003. Manual configuration often leads to error. *Id.* Merchant is directed to a translation technique that purportedly addresses this problem. Paragraph 0008. Merchant enables the entry of high-level language commands that are easier for humans to understand and thus are less prone to human error. Paragraph 0014. Merchant discloses a system that translates these high-level language commands into device-specific commands that the storage can “understand.” *Id.*; see also Fig. 1.

Notably, Merchant teaches that if a new type of data storage device is added to the storage already present in the system, the high-level, device-independent commands that are used for the storage already present in the system also can be used for the new type of data storage device. Paragraph 0046.

B. Brief Summary of Stewart

Stewart is directed to a system and method for providing multiple access levels to users of a wireless network system. Abstract. Stewart teaches that each of a plurality of users is assigned a privilege level. Col. 3, ll. 54-62. A user’s privilege level dictates the level of security clearance that user has when accessing various network resources. *Id.*

C. The Examiner Erred in Rejecting Claims 1-4 and 10-11 Under 35 U.S.C. § 103(a) in View of Merchant and Stewart

Claims 1-4 and 10-11 stand rejected as allegedly obvious in view of Merchant and Stewart. Appellant respectfully traverses this rejection. Claim 1 is representative of this group of claims.

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Claim 1 is directed to a computer-readable medium that comprises a uniform interface for configuring and managing a plurality of different types of network devices. The uniform interface comprises a library having generic commands that can be applied to the network devices. The uniform interface further comprises plug-in modules that convert the generic commands into device-specific commands for remote individual devices. Claim 1 further requires that “at least one of said generic commands puts a device into its most privileged level through an established connection to the device.”

The Examiner admits that Merchant fails to teach the limitation quoted above and, as a result, turns to Stewart. The Examiner asserts that Stewart teaches the above-quoted limitation at col. 3, ll. 54-62 and attempts to combine this limitation with Merchant in an effort to render claim 1 obvious.

Appellant respectfully traverses the Examiner’s rejection for multiple reasons. First, neither reference teaches the quoted limitation. The portion of Stewart to which the Examiner cites merely teaches that a “network system may selectively provide different access levels to network resources depending on the access or privilege level of the user.” There is no mention of a “most privileged level” or of the possibility that the network system would enable any particular user to access the “most privileged level” of a network resource, nor is such a possibility inherently taught. Momentarily setting aside the fact that Stewart does not teach this aspect of the quoted limitation, Stewart still fails to teach or even suggest that a “generic command” puts a device into its most privileged level. Instead, Stewart only teaches that the access/privilege level to which a user is entitled access depends on the user’s own privilege level. A user with a low privilege level is entitled to access only low-security level items, while a user with a higher privilege level is entitled to access higher-security level items. In neither case, however, is the use of “generic commands” taught.

Appellant also traverses the Examiner’s rejection because Stewart, even when combined with Merchant, still fails to teach the quoted limitation. As the Examiner admits, and as Appellant agrees, Merchant fails to teach the quoted limitation. Further, as Appellant has explained above, Stewart fails to teach the

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quoted limitation. Thus, the Examiner aims to combine two references to render obvious a limitation that neither one of the references teaches alone. The Examiner asserts that it would be obvious to modify Merchant to put a device into a most privileged level because Stewart teaches providing different privilege levels. Final Office Action, p. 3. This is an incomplete argument. As explained above, there is no logical, reasonable basis for one to conclude that Stewart's teaching of different privilege levels would result in Merchant placing a device in a most privileged level.

Even if, *arguendo*, Stewart did teach placing a device into a most privileged level, the Examiner fails to explain how or why any of Merchant's "generic commands" would be used to place a device into its most privileged level. The Examiner has not explained why Merchant's generic commands would even be necessary to placing any of Merchant's device in a "most privileged level," nor has the Examiner explained why Merchant's devices need to be in a "most privileged level" at all, nor has the Examiner explained how the user privilege levels (described in Stewart, col. 3, ll. 54-62) – to which Stewart's device privilege levels are inextricably linked – would be integrated into Merchant's system, nor has the Examiner explained why the users should be integrated into Merchant's system. Instead, respectfully, it appears to Appellant that the Examiner – having located the Merchant reference – merely attempted to find a second reference that used the term "privilege level." Having found Stewart, which does mention privilege levels, the Examiner hastily, unfairly and unreasonably combined Stewart and Merchant to reject Appellant's claims without giving due consideration to how or why the combination should be made.

Based on the foregoing, Appellant respectfully submits that the Examiner erred in rejecting claim 1. Thus, Appellant respectfully requests that the Board reverse this rejection and set all claims in this grouping for issue.

D. The Examiner Erred in Rejecting Claims 5 and 8 Under 35 U.S.C. § 103(a) in View of Merchant, Stewart and Tindal

Claims 5 and 8 stand rejected as allegedly obvious in view of Merchant, Stewart and Tindal. Appellant traverses this rejection. Claims 5 and 8 are

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dependent upon claim 1. As explained above, the Examiner erred in rejecting claim 1 using Merchant and Stewart. Tindal fails to satisfy the deficiencies of the combination of Merchant and Stewart. Thus, the Examiner erred in rejecting claims 5 and 8 for much the same reason as claim 1. Appellant respectfully requests that the Board reverse this rejection and set claims 5 and 8 for issue.

E. The Examiner Erred in Rejecting Claims 6-7 and 23 Under 35 U.S.C. § 103(a) in View of Merchant, Stewart and Rangachar

Claims 6-7 and 23 stand rejected as allegedly obvious in view of Merchant, Stewart and Rangachar. Appellant respectfully traverses this rejection. Claims 6-7 and 23 are dependent upon claim 1. As explained above, the Examiner erred in rejecting claim 1 in view of Merchant and Stewart. Rangachar fails to satisfy the deficiencies of the combination of Merchant and Stewart. Thus, the Examiner erred in rejecting claims 6-7 and 23 for much the same reasons as claim 1. Appellant respectfully requests that the Board reverse this rejection and set claims 6-7 and 23 for issue.

F. The Examiner Erred in Rejecting Claims 12-16 Under 35 U.S.C. § 103(a) in View of Merchant and Tindal

Claims 12-16 stand rejected as allegedly obvious in view of Merchant and Tindal. Appellant respectfully traverses this rejection. Claim 12 is representative of this group of claims.

Claim 12 requires “said module converting a response received from said given device into a generic format for presentation to said library.” The Examiner contends on p. 21 of the Office Action that this limitation, previously found in now-cancelled claim 21, is taught in paragraph 0046 of Merchant. Respectfully, the Examiner is mistaken. Paragraph 0046 is a continuation of paragraph 0045. Paragraph 0045 discusses the translation of “host-independent commands to device-specific commands.” Paragraph 0046 appears to teach that if a new type of device is added to the system, the device-specific/host-independent command formatting system is still usable for that device. It further appears to teach that if a new host class is added to the system, the device-specific/host-independent command formatting system should still be usable for the new host.

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None of the foregoing is the same as teaching a “module” (as specifically defined by claim 12) converting a “response from a device” (i.e., a message or signal in response to a received message or signal) into a “generic format for presentation to said library.” In fact, this portion of Merchant teaches the opposite: the conversion of high-level, host-independent language commands to device-specific commands. Because Merchant appears to fail to teach or suggest the quoted limitation limitation, and further because Tindal does not satisfy Merchant’s deficiency, claim 12 and dependent claims 13-18, 20 and 22 are patentable over the combination of Merchant and Tindal.

Based on the foregoing, Appellant respectfully submits that the Examiner erred in rejecting claim 12. Thus, Appellant respectfully requests that the Board reverse this rejection and set all claims in this grouping for issue.

G. The Examiner Erred in Rejecting Claims 17-18 and 22 Under 35 U.S.C. § 103(a) in View of Merchant, Tindal and Rangachar

Claims 17-18 and 22 stand rejected as allegedly obvious in view of Merchant, Tindal and Rangachar. Appellant respectfully traverses this rejection. Claims 17-18 and 22 depend on claim 12. As explained above, the Examiner erred in rejecting claim 12 in view of Merchant and Tindal. Rangachar fails to satisfy the deficiencies of the combination of Merchant and Tindal. Thus, the Examiner erred in rejecting claims 17-18 and 22 for much the same reasons as claim 12. Appellant respectfully requests that the Board reverse this rejection and set claims 17-18 and 22 for issue.

H. The Examiner Erred in Rejecting Claim 20 Under 35 U.S.C. § 103(a) in View of Merchant, Tindal and Stewart

Claim 20 stands rejected as allegedly obvious in view of Merchant, Tindal and Stewart. Appellant respectfully traverses this rejection. Claim 20 depends on claim 12. As explained above, the Examiner erred in rejecting claim 12 in view of Merchant and Tindal. Stewart fails to satisfy the deficiencies of the combination of Merchant and Tindal. Thus, the Examiner erred in rejecting claim 20 in view of Merchant, Tindal and Stewart. Appellant respectfully requests that the Board reverse this rejection and set this claim for issue.

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I. Conclusion

For the reasons stated above, Appellant respectfully submits that the Examiner erred in rejecting all pending claims. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's Deposit Account No. 08-2025.

Respectfully submitted,

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VIII. CLAIMS APPENDIX

1. (Previously presented) A computer-readable medium comprising a uniform interface for configuring and managing a plurality of different types of network devices, the uniform interface comprising:
 - a library containing generic commands that can be applied to said network devices; and
 - a plurality of plug-in modules that can register with said library, each of said modules operating to convert at least some of said generic commands into device-specific commands and transmit said device-specific commands to remote individual devices of a type that are associated with the module;

wherein at least one of said generic commands puts a device into its most privileged level through an established connection to the device.
2. (Previously presented) The computer-readable medium of claim 1 wherein said plug-in modules transmit each of said commands in accordance with a transmission protocol specific to the individual devices, respectively.
3. (Previously presented) The computer-readable medium of claim 2 wherein one of said transmission protocols comprises Telnet.
4. (Previously presented) The computer-readable medium of claim 1 wherein another one of said generic commands establishes a connection to a network device through which configuration commands can be sent and information can be retrieved.
5. (Previously presented) The computer-readable medium of claim 1 wherein another one of said generic commands retrieves the current configuration of a network device by executing appropriate commands on the network device.

6. (Previously presented) The computer-readable medium of claim 1 wherein another one of said generic commands post-processes configuration information retrieved from another device to render said information suitable for storage and saves it to a local file system.
7. (Previously presented) The computer-readable medium of claim 1 wherein another one of said generic commands puts another device into a mode where it can accept configuration commands through another established connection at an enabled level.
8. (Previously presented) The computer-readable medium of claim 1 wherein another one of said generic commands gives another device a complete configuration based on information from a stored configuration file.
9. (Cancelled).
10. (Previously presented) The computer-readable medium of claim 1 wherein said library is responsive to the receipt of a command for a given device to determine the module that corresponds to said given device and provide the received command to said module.
11. (Previously presented) The computer-readable medium of claim 1 wherein said modules convert responses received from the individual devices with which they are associated into a generic format for presentation to said library.
12. (Previously presented) A method for configuring and managing a plurality of different types of network devices, comprising:
establishing a library of generic commands that can be applied to said network devices;

registering a plurality of plug-in modules with said library, each of said modules operating to convert at least some of said generic commands into device-specific commands;
receiving commands for a given device that is remote from said modules;
determining the module that corresponds to said given device and forwarding the received commands to said module;
transmitting said device-specific commands from said module to said given device;
one of said generic commands giving a device a complete configuration based on information from a stored configuration file; and
said module converting a response received from said given device into a generic format for presentation to said library.

13. (Original) The method of claim 12 wherein said plug-in modules transmit each of said commands in accordance with a transmission protocol specific to the individual devices, respectively.

14. (Original) The method of claim 13 wherein one of said transmission protocols comprises Telnet.

15. (Previously presented) The method of claim 12 wherein another one of said generic commands establishes a connection to a network device through which configuration commands can be sent and information can be retrieved.

16. (Previously presented) The method of claim 12 wherein another one of said generic commands retrieves the current configuration of a network device by executing appropriate commands on the network device.

17. (Previously presented) The method of claim 12 wherein another one of said generic commands post-processes configuration information retrieved from

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another device to render said information suitable for storage and saves it to a local file system.

18. (Previously presented) The method of claim 12 wherein another one of said generic commands puts another device into a mode where it can accept configuration commands through an established connection at an enabled level.

19. (Cancelled).

20. (Previously presented) The method of claim 12 wherein another one of said generic commands puts another device into its most privileged level through an established connection to the another device.

21. (Cancelled).

22. (Previously presented) The method of claim 12 wherein said network devices are selected from the group consisting of switches, firewalls, routers and load balancers.

23. (Previously presented) The computer-readable medium of claim 1 wherein said network devices comprise devices selected from the group consisting of switches, firewalls, routers and load balancers.

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IX. EVIDENCE APPENDIX

None.

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X. RELATED PROCEEDINGS APPENDIX

None.